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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,144	07/12/2002	Adelbert Bacher	9286-9	9487
20792	7590	08/23/2004	EXAMINER	
MYERS BIGEL SIBLEY & SAJOVEC			KOSSON, ROSANNE	
PO BOX 37428			ART UNIT	
RALEIGH, NC 27627			PAPER NUMBER	

1651

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

### Office Action Summary

**Application No.**

10/070,144

**Applicant(s)**

BACHER ET AL.

**Examiner**

Rosanne Kosson

**Art Unit**

1651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If the period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2002.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-14 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-10, drawn to a method for screening for the presence or absence of inhibition of 6,7-dimethyl-8-ribityllumazine synthase activity and to a method for screening for the presence or absence of resistance to inhibition of 6,7-dimethyl-8-ribityllumazine synthase activity.

Group II, claim(s) 11, drawn to an isolated protein having a plant-type 6,7-dimethyl-8-ribityllumazine synthase sequence.

Group III, claim(s) 12, drawn to an isolated DNA encoding a protein comprising a 6,7-dimethyl-8-ribityllumazine synthase sequence.

Group IV, claim(s) 13, drawn to a method of inhibiting 6,7-dimethyl-8-ribityllumazine synthase activity in a plant.

Group V, claim(s) 14, drawn to an inhibitor of a plant 6,7-dimethyl-8-ribityllumazine synthase activity.

The inventions listed as Groups I-V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons. Guyer et al. (WO 99/38986) discloses a method for screening for the presence or absence of inhibition of 6,7-dimethyl-8-ribityllumazine synthase activity by incubating two mixtures of the synthase with 5-amino-6-ribitylamino-2,4(1H,3H)pyrimidine-dione and 3,4-dihydroxy-2-butanone 4-phosphate. One mixture contains a test compound, a putative inhibitor, and one mixture contains no additional compound (see pp. 11, 42 and 43- Examples 9 and 10). The method of screening for resistance to inhibition involves the same steps as the method of screening for an inhibitor. Consequently, the special technical feature of Group I, a method for screening for the presence or absence of inhibition of 6,7-

dimethyl-8-ribityllumazine synthase activity, does not define the invention over the prior art. Because the invention of Group I is not novel with respect to the cited reference, it is clear that the claims of Groups I-V lack a single common technical feature that defines them over the prior art. Accordingly, a holding of lack of unity of invention is proper.

**Applicants are advised that, for the reply to this requirement to be complete, an election of the invention to be examined must be included even though the requirement be traversed (37 CFR §1.143).**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosanne Kosson whose telephone number is 571-272-2923. The examiner can normally be reached on Monday-Friday, 8:30-6:00, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Rosanne Kosson  
Examiner  
Art Unit 1651

rk  
2004-08-16



FRANCISCO PRATS  
PRIMARY EXAMINER